

```

chain nodes :
1  2  3  4  5  6  7  8  9
chain bonds :
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exact/norm bonds :
3-5  6-7  6-9
exact bonds :
1-2  1-8  2-3  3-4  3-6

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G1:OH,NH2

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Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom

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L1        STRUCTURE UPLOADED

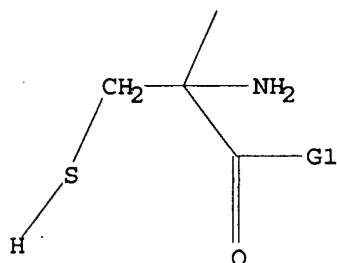
=> que L1

L2 QUE L1

=> d L1

L1 HAS NO ANSWERS

L1 STR



G1 OH,NH2

Structure attributes must be viewed using STN Express query preparation.

=> s L1 full

FULL SEARCH INITIATED 15:21:48 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4101 TO ITERATE

100.0% PROCESSED 4101 ITERATIONS

31 ANSWERS

SEARCH TIME: 00.00.01

L3 31 SEA SSS FUL L1

=> s chiral

L4 69 CHIRAL

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

177.05

177.26

FILE 'CAPLUS' ENTERED AT 15:22:11 ON 08 AUG 2007

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FILE COVERS 1907 - 8 Aug 2007 VOL 147 ISS 7

FILE LAST UPDATED: 7 Aug 2007 (20070807/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s L3

L5 72 L3

=> s chiral

117182 CHIRAL  
16 CHIRALS

L6 117186 CHIRAL  
(CHIRAL OR CHIRALS)

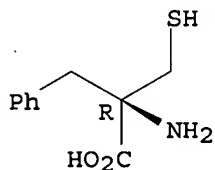
=> s L5 and L6

L7 6 L5 AND L6

=> d L7 1-6 bib abs hitstr

L7 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2006:959201 CAPLUS  
DN 145:489527  
TI Enantioselective Synthesis of (R)- and (S)- $\alpha$ -Alkylcysteines via  
Phase-Transfer Catalytic Alkylation  
AU Kim, Taek-Soo; Lee, Yeon-Ju; Jeong, Byeong-Seon; Park, Hyeung-Geun; Jew,  
Sang-Sup  
CS Research Institute of Pharmaceutical Science and College of Pharmacy,  
Seoul National University, Seoul, 151-742, S. Korea  
SO Journal of Organic Chemistry (2006), 71(21), 8276-8278  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society  
DT Journal  
LA English  
OS CASREACT 145:489527  
AB We reported efficient enantioselective synthetic methodologies for  
(R)- $\alpha$ -alkylcysteines and (S)- $\alpha$ -alkylcysteines. The  
phase-transfer catalytic alkylation of 2-phenyl-2-thiazoline-4-carboxylic  
acid tert-Bu ester and 2-o-biphenyl-2-thiazoline-4-carboxylic acid tert-Bu  
ester, in the presence of chiral catalysts, gave the  
corresponding alkylated products, which could be hydrolyzed to provide  
(R)- $\alpha$ -alkylcysteines (67->99% ee) and (S)- $\alpha$ -alkylcysteines  
(66-88% ee), resp.  
IT 451496-27-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(enantioselective synthesis of (R)- and (S)- $\alpha$ -alkylcysteines via  
phase-transfer catalytic alkylation)  
RN 451496-27-8 CAPLUS  
CN D-Phenylalanine,  $\alpha$ -(mercaptomethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

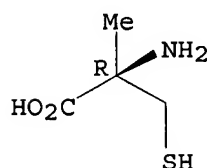


RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2006:505921 CAPLUS  
DN 146:442041  
TI Synthetic studies on halipeptins, antiinflammatory cyclodepsipeptides  
AU Hara, Sousuke; Makino, Kazuishi; Hamada, Yasumasa  
CS Graduate School of Pharmaceutical Sciences, Chiba University, Yayoi-cho,  
Inage-ku, Chiba, 263-8522, Japan  
SO Peptide Science (2006), Volume Date 2005, 42nd, 39-42  
CODEN: PSCIFQ; ISSN: 1344-7661

PB Japanese Peptide Society  
 DT Journal  
 LA English  
 AB The total synthesis of marine-derived cyclodepsipeptide halipeptin A has been achieved. The key reactions for construction of the stereo-centers involve proline-catalyzed enantioselective oxy-amination and asym. aldol reaction using chiral oxazaborolidinone reagent. For assembly of the cyclodepsipeptide skeleton, BMTB method, acid chloride method and HATU method were utilized.  
 IT 148766-37-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of halipeptins antiinflammatory cyclodepsipeptides via proline-catalyzed enantioselective oxy-amination and asym. aldol reaction using chiral oxazaborolidinone reagent)  
 RN 148766-37-4 CAPLUS  
 CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



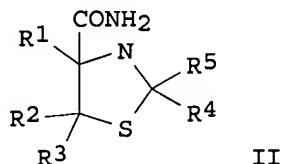
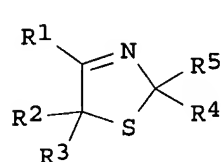
● HCl

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:588917 CAPLUS  
 DN 143:115793  
 TI Process for preparation of chiral mercaptoamino acids via thiazolines.  
 IN Kotthaus, Martina; Mayrhofer, Herbert; Rogl, Christian; Krich, Sylvia; Simetzberger, Michael  
 PA DSM Fine Chemicals Austria Nfg G.m.b.H. & Co K.-G., Austria  
 SO PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005061469	A1	20050707	WO 2004-EP12919	20041115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1692120	A1	20060823	EP 2004-797894	20041115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 2007112216	A1	20070517	US 2006-581790	20060606

PRAI AT 2003-1968 A 20031209  
 WO 2004-EP12919 W 20041115  
 OS CASREACT 143:115793; MARPAT 143:115793  
 GI



AB HSCR3R2CR1(NH2)CO2H [R1-R3 = H, aryl, alkylaryl, aralkyl, alkyl, alkenyl; R2R3 = atoms to form an (unsatd.) ring], were prepared by reaction of R1COCR2R3X (R1-R3 as above; X = Cl, Br, iodo, triflate, acetate, sulfonate) with (aqueous) NH3, a sulfide, and R4COR5 [R4, R5 = H, alkyl, aryl; R4R5 = atoms to form a (substituted) ring] to give thiazolines (I; variables as above) followed by addition of HCN and selective hydrolysis with mineral acid to give thiazolidinecarboxamides (II; variables as above). II may then be treated with an amidase or a chiral acid to afford chiral II followed by treatment with acid to afford the title mercaptoamino acids. Alternatively, racemic II may be treated with acid followed by conversion to the desired chiral mercaptoamino acids. Chiral  $\alpha$ -methylcysteine hydrochloride was prepared by the claimed method.

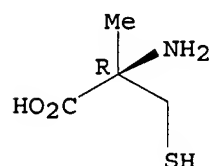
IT 148766-37-4P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of chiral mercaptoamino acids via thiazolines)

RN 148766-37-4 CAPLUS

CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

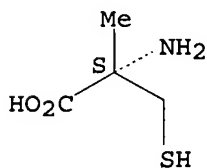
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:287739 CAPLUS  
 DN 143:460393  
 TI Asymmetric synthesis of (R)- and (S)- $\alpha$ -methylcysteine  
 AU Singh, Satendra  
 CS BACHEM Bioscience Inc., King of Prussia, PA, 19406, USA  
 SO Recent Research Developments in Organic Chemistry (2004), 8(Pt. 2), 323-339  
 CODEN: RDOCFJ  
 PB Transworld Research Network  
 DT Journal; General Review  
 LA English  
 AB A review.  $\alpha$ -Methylcysteine is an important amino acid, which is

used to confer conformational constraints, extend biol. half-life, and avoid racemization. Due to the labile nature of the sulfhydryl group, asym. synthesis of  $\alpha$ -methylcysteine has been rather challenging. There are mainly five strategies for synthesizing  $\alpha$ -methylcysteine: (1) thiolation of bromomethyl bislactim ether, (2) regioselective ring opening of chiral aziridine or  $\beta$ -lactone with thiolate nucleophile, (3) utilization of Seebach's "self-regeneration of chirality" approach to thiomethylate oxazolidinone derived from alanine or methylate thiazolidine derivative of cysteine, (4) enzymic resolution, and (5) use of camphorsultam chiral auxiliary to direct methylation of thiazoline. Stereochem. of each synthesis is discussed.

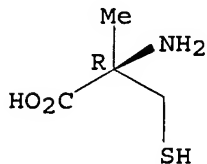
IT 239101-34-9P 441317-73-3P  
 RL: BPN (Biosynthetic preparation); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (asym. synthesis of (R)- and (S)-methylcysteine via five strategies)  
 RN 239101-34-9 CAPLUS  
 CN D-Cysteine, 2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 441317-73-3 CAPLUS  
 CN L-Cysteine, 2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

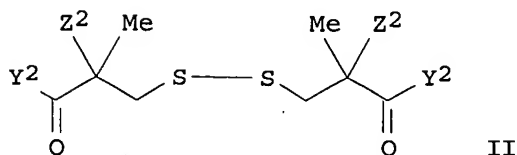
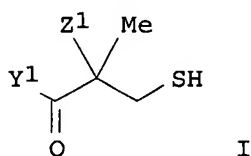
L7 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:260016 CAPLUS  
 DN 142:336046  
 TI Process for the preparation of optically active 2-amino-3-mercapto-2-methyl-propionic acid compounds  
 IN Matsumoto, Shingo; Murao, Hiroshi; Yamaguchi, Takao; Izumida, Masashi; Ueda, Yasuyoshi  
 PA Kaneka Corporation, Japan  
 SO PCT Int. Appl., 69 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005026110	A1	20050324	WO 2004-JP12157	20040818
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

EP 1666458 A1 20060607 EP 2004-772118 20040818  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

US 2007010689 A1 20070111 US 2006-570791 20060913  
 PRAI JP 2003-317402 A 20030909  
 WO 2004-JP12157 W 20040818  
 OS MARPAT 142:336046  
 GI



AB Process for the preparation of optically active 2-amino-3-mercapto-2-methylpropionic acid derivs. I [Y1 = OH, (un)substituted amino; Z1 = (un)substituted amino; further detail on Y1, Z1 is given.] or a salt thereof is characterized in that optically active compds. II [Y2 = OH, (un)substituted amino; Z2 = (un)substituted amino; further detail on Y2, Z2 is given.] are used as intermediates and the sulfur-sulfur bond of optically active compds. II [Y2 = OH, (un)substituted amino; Z2 = (un)substituted amino; further detail on Y2, Z2 is given.] is reductively cleaved to give the corresponding optically active 2-amino-3-mercapto-2-methylpropionic acid derivs. For example, a mixture of (5*S*,5'*S*)-5,5'-[dithiobis(methylene)]bis(5-methylhydantoin) (5.9 g), e.g., prepared from racemic 5-tert-butylthiomethyl-5-methylhydantoin in 5 steps, triphenylphosphine (6.4 g), toluene (50.0 g), water (15.5 g) and concentrate

HCl (6.4 g) was stirred at 80 °C for 24 h. The reaction mixture was treated with 30% aqueous NaOH to pH 9.0, then washed with toluene. The aqueous solution was adjusted to pH 2.8 with concentrate HCl to afford

D-5-mercaptomethyl-5-methylhydantoin (5.3 g) in 99.6 area % purity.

IT 22681-73-8DP, derivs., optically active

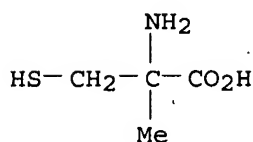
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(claimed compound; preparation of optically active

2-amino-3-mercapto-2-methylpropionic acid compds. via reductive cleavage of disulfide fragment in chiral 3,3'-dithiobis(2-amino-2-methylpropionic acid) derivs.)

RN 22681-73-8 CAPLUS

CN Cysteine, 2-methyl- (8CI, 9CI) (CA INDEX NAME)



IT 148766-37-4P

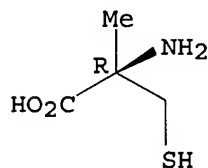
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of L-2-amino-3-mercapto-2-methylpropionic acid hydrochloride from L-2-amino-3-tert-butylthio-2-methylpropionic acid using hydrochloride)

RN 148766-37-4 CAPLUS

CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IT 151062-55-4P

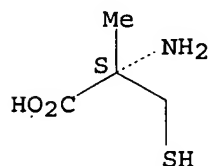
RL: SPN (Synthetic preparation); PREP (Preparation)

(reduction of (2S,2'S)-3,3'-dithiobis(2-amino-2-methylpropionic acid) to D-2-amino-3-mercapto-2-methylpropionic acid using triphenylphosphine)

RN 151062-55-4 CAPLUS

CN D-Cysteine, 2-methyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 6 CAPLUS ' COPYRIGHT 2007 ACS on STN

AN 1993:473043 CAPLUS

DN 119:73043

TI Enantioselective synthesis of 2-alkyl substituted cysteines

AU Pattenden, Gerald; Thom, Stephen M.; Jones, Martin F.

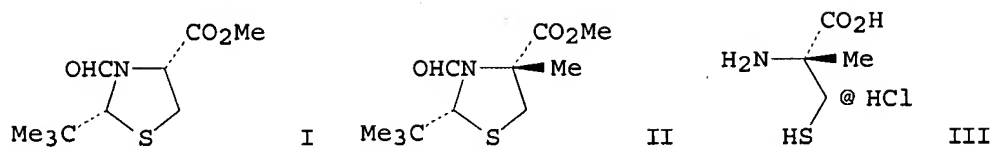
CS Dep. Chem., Univ. Nottingham, Nottingham, NG7 2RD, UK

SO Tetrahedron (1993), 49(10), 2131-8

CODEN: TETRAB; ISSN: 0040-4020



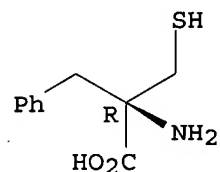
DT Journal  
 LA English  
 OS CASREACT 119:73043  
 GI



AB Treatment of (R)-cysteine-derived thiazolidine derivative I with LDA-DMPU at -90°, followed by alkylation with MeI gave methylated thiazolidine II containing the Me and tert-Bu groups virtually exclusively anti to one another. Hydrolysis of II by 5M HCl gave (R)-2-methylcysteine hydrochloride (III) in excellent yield and enantiomeric purity. A range of other 2-alkyl substituted cysteines of excellent optical purity are prepared by this modification of Seebach's "self-reproduction of chirality" protocol.

IT 148692-23-3P 148692-24-4P 148766-37-4P  
 RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (enantioselective synthesis of)  
 RN 148692-23-3 CAPLUS  
 CN D-Phenylalanine, α-(mercaptomethyl)-, hydrochloride (9CI) (CA INDEX NAME)

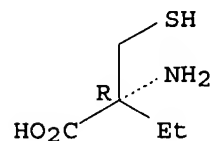
Absolute stereochemistry.



● HCl

RN 148692-24-4 CAPLUS  
 CN Butanoic acid, 2-amino-2-(mercaptomethyl)-, hydrochloride, (R)- (9CI) (CA INDEX NAME)

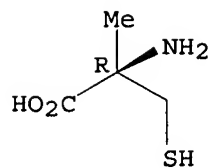
Absolute stereochemistry.



● HCl

RN 148766-37-4 CAPLUS  
 CN L-Cysteine, 2-methyl-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

=>

---Logging off of STN---

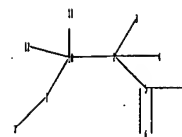
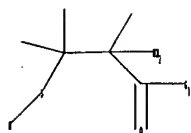
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Executing the logoff script...

=> LOG Y

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	ENTRY	SESSION
FULL ESTIMATED COST	34.10	211.36
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-4.68	-4.68

STN INTERNATIONAL LOGOFF AT 15:22:48 ON 08 AUG 2007



chain nodes :  
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 exact/norm bonds :  
 1-10 2-4 5-6 5-8  
 exact bonds :  
 1-7 2-5 2-3 2-10 10-11 10-12

G1:OH,NH2

Match level :  
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 10:Atom 11:Atom  
 12:Atom

L1 STRUCTURE UPLOADED

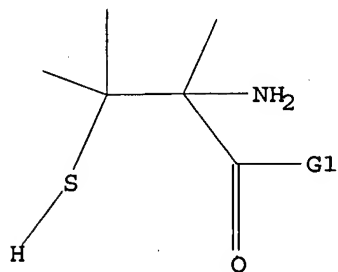
=> que L1

L2 QUE L1

=> d L1

L1 HAS NO ANSWERS

L1 STR



G1 OH,NH2

Structure attributes must be viewed using STN Express query preparation.

=> s L1 full

FULL SEARCH INITIATED 15:30:51 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3600 TO ITERATE

100.0% PROCESSED 3600 ITERATIONS

7 ANSWERS

SEARCH TIME: 00.00.01

L3 7 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 15:30:59 ON 08 AUG 2007

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FILE COVERS 1907 - 8 Aug 2007 VOL 147 ISS 7

FILE LAST UPDATED: 7 Aug 2007 (20070807/ED)

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=> s L3

L4 2 L3

=> s chiral  
 117182 CHIRAL  
 16 CHIRALS  
 L5 117186 CHIRAL  
 (CHIRAL OR CHIRALS)

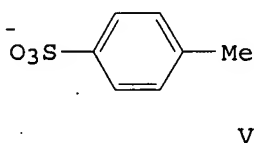
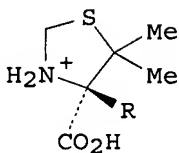
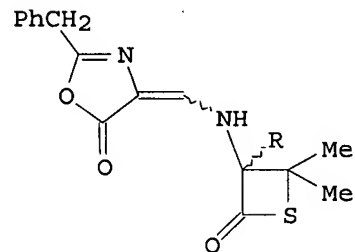
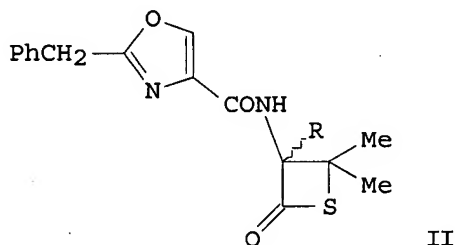
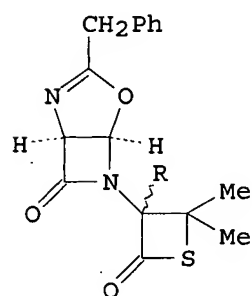
=> s L5 and L4  
 L6 0 L5 AND L4

=> s optically active  
 102297 OPTICALLY  
 992266 ACTIVE  
 1229 ACTIVES  
 992973 ACTIVE  
 (ACTIVE OR ACTIVES)  
 L7 39205 OPTICALLY ACTIVE  
 (OPTICALLY(W) ACTIVE)

=> s L7 and L4  
 L8 0 L7 AND L4

=> d L4 1-2 bib abs hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1984:570942 CAPLUS  
 DN 101:170942  
 TI Studies related to thietan-2-ones. Part 2. Conversion of a  
 benzylpenicillin-derived thietan-2-one into D- and L-2-  
 methylpenicillamines  
 AU Crilley, Martine M. L.; Stoodley, Richard J.  
 CS Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU,  
 UK  
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and  
 Bio-Organic Chemistry (1972-1999) (1984), (5), 1127-32  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DT Journal  
 LA English  
 GI



AB Isomerization of the (3R)- and (3S)-benzylpenicillin-derived thietanones I

(R =  $\beta$ -,  $\alpha$ -Me, resp.) with m-ClC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H-MeOH gave the [(benzyloxazolylcarbonyl)amino]thietanones II (R as before), whereas isomerization in CH<sub>2</sub>Cl<sub>2</sub> containing BF<sub>3</sub> resulted in formation of the [(benzyloxooxazolinylidene)amino]thietanones III (R as before). Ozonolysis of III (R =  $\beta$ -,  $\alpha$ -Me, resp.), followed by addition of EtOH, deformylation, addition of 4-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H, and hydrolysis gave D- (IV) and L-2-methylpenicillamine toluene-p-sulfonate, resp. D-Penicillamine toluene-p-sulfonate underwent thiazolidine formation with HCHO to give V (R = H) more rapidly than IV did to give V (R = Me).

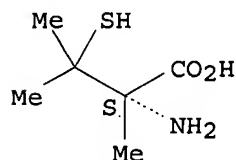
IT 92462-78-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, with formaldehyde, thiazolidine by)  
 RN 92462-78-7 CAPLUS  
 CN D-Isovaline, 3-mercapto-3-methyl-, 4-methylbenzenesulfonate (salt) (9CI)  
 (CA INDEX NAME)

CM 1

CRN 92462-77-6

CMF C6 H13 N O2 S

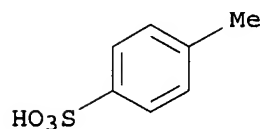
Absolute stereochemistry.



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



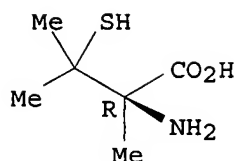
IT 92462-82-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 92462-82-3 CAPLUS  
 CN L-Isovaline, 3-mercapto-3-methyl-, 4-methylbenzenesulfonate (salt) (9CI)  
 (CA INDEX NAME)

CM 1

CRN 92462-81-2

CMF C6 H13 N O2 S

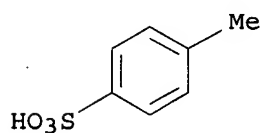
Absolute stereochemistry.



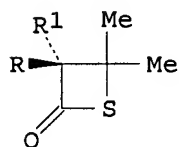
CM 2

CRN 104-15-4

CMF C7 H8 O3 S



L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1984:22300 CAPLUS  
 DN 100:22300  
 TI Studies related to thietan-2-ones.- Part 1. Conversion of D-penicillamine into DL-2-methylpenicillamine using thietan-2-one-based chemistry  
 AU Al-Zaidi, Shakir M. R.; Crilley, Martine M. L.; Stoodley, Richard J.  
 CS Dep. Org. Chem., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK  
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1983), (9), 2259-65  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DT Journal  
 LA English  
 GI



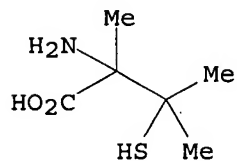
I

AB Intramol. cyclocondensation reaction of D-penicillamine followed by treatment with  $\text{PCl}_5$  in  $\text{CH}_2\text{Cl}_2$  gave thietanone I ( $\text{R} = \text{H}$ ,  $\text{R}_1 = \text{N}+\text{H}_3 \text{Cl}^-$ ), which underwent condensation reaction with  $\text{PhCHO}$  and 2-furaldehyde to give I [ $\text{R} = \text{H}$ ,  $\text{R}_1 = \text{N}:\text{CR}_2$  ( $\text{R}_2 = \text{Ph}$ , 2-furyl) (II and III, resp.), resp. Methylation of II and III by  $\text{MeI}$  in THF containing  $\text{Me}_3\text{COK}$  gave I ( $\text{R} \neq \text{R}_1 = \text{Me}$ ,  $\text{N}:\text{CR}_2$ ,  $\text{R}_2$  as before), which underwent hydrolysis in the presence of 4-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H and  $\text{HCl}$ , resp., to give I [ $\text{R} \neq \text{R}_1 = \text{Me}$ ,  $\text{N}+\text{H}_3 \text{X}^-$  ( $\text{X} = 4\text{-MeC}_6\text{H}_4\text{SO}_3, \text{Cl}$ )] (IV and V); resp. Hydrolysis of IV and V in refluxing  $\text{H}_2\text{O}$  gave  $\text{Me}_2\text{C}(\text{SH})\text{CMe}(\text{CO}_2\text{H})\text{N}+\text{H}_3 \text{X}^-$  ( $\text{X}$  as before).  
 IT 88168-75-6P 88168-76-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 88168-75-6 CAPLUS  
 CN Isovaline, 3-mercapto-3-methyl-, 4-methylbenzenesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 88168-74-5

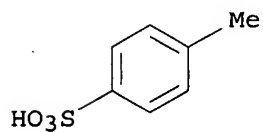
CMF C6 H13 N O2 S



CM 2

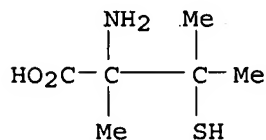
CRN 104-15-4

CMF C7 H8 O3 S



RN 88168-76-7 CAPLUS

CN Isovaline, 3-mercapto-3-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

SINCE FILE

ENTRY

17.51

SINCE FILE

ENTRY

-1.56

TOTAL

SESSION

189.82

TOTAL

SESSION

-1.56